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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/526,948

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Peter Frank Ekhart

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EXAMINER

BLAND, LAYLA D

ART UNIT

PAPER NUMBER

1609

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

03/13/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/526,948

Applicant(s)

EKHART ET AL.

Examiner

Layla Bland

Art Unit

1609

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

This application claims priority to PCT/NL03/00625, September 9, 2003 and European application 02078684.4, September 9, 2002. The preliminary amendment of September 14, 2006 is acknowledged. Claims 12-29 are currently pending and are examined on the merits herein.

Specification

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

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The specification is objected to because the Brief Description of the Drawings section is missing and the page numbering of the claims, abstract, etc. should continue throughout the application and not start over at one. Appropriate correction is required.

The use of the trademarks SATIETROL, ENSURE, SLIM-FAST, RHEOMETRICS have been noted in this application. They should be denoted with ® or with all capital letters wherever they appear.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 12 rejected under 35 U.S.C. 102(b) as being anticipated by Kaufman (US 5,605,893, February 25, 1997).

Claim 12 is drawn to a food composition containing 1-10 wt.% of a branched α -glucan having an average molar weight of at least 10^5 Da and at least 1 wt.% of a food protein.

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Kaufman teaches a food composition in the form of a bar comprising 17-24 grams of total carbohydrates, 5-20 grams of protein, and 3-7 grams of fat for a total of about 20 to 50 grams. The bar contains 5-15 grams of slowly absorbed carbohydrate in the form of uncooked cornstarch, which generally comprises about 73% amylopectin by weight [column 3, lines 28-39]. For a 50g bar containing 5g of cornstarch, amylopectin is 7.4% by weight and protein is 10%-40% by weight. Amylopectin is a branched (4-5%) α -glucan with $M_w=10^7$ - 10^9 (Walker, "Polysaccharide Association Structures in Food," Marcel Dekker, 1998, page 63).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13-23 rejected under 35 U.S.C. 103(a) as being unpatentable over Kaufman (US 5,605,893, February 25, 1997) in view of Okuno, et al. (Diabetes Res. Clin. Pract. 1985 Dec; 1(4):221-5) and further in view of Barbier, et al. (US2002/0035089 A1, March 21, 2002).

Claim 13 is drawn to a method of inducing satiety and satiation in a person in need thereof, comprising administering an α -glucan having an average molar weight of at least 10^5 Da. Claims 14-16 further limit claim 13 as to the degree of branching and molar weight of the glucan. Claim 17 stipulates the glucan must contain α (1,4) and α

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(1,6) linkages. Claim 18 is drawn to the method of claim 13, wherein the α -glucan is non-ionic. Claim 19 is drawn to the method of claim 13, wherein the α -glucan is produced by enzymatic glucosyl transfer from sucrose. Claims 21 and 22 further limit claim 13 such that the α -glucan is combined with a protein, specifically a processed milk or soy protein.

Kaufman teaches a method of treating diabetic patients to prevent hypoglycemic episodes by administering a food composition comprising amylopectin. Amylopectin has a molar weight of 10^7 - 10^9 as mentioned before, has α -(1,4) and α -(1,6) linkages, and is nonionic. Kaufman also teaches a source of protein in the food composition can be soy protein [column 3, line 53]. Kaufman does not explicitly teach a method of inducing satiety and satiation.

One skilled in the art would appreciate that the treatment for hypoglycemia which comprises administering a food bar to a patient would also induce satiety in the patient, especially if it was done repeatedly as recited in claim 13. Okuno, et al. teach hunger as a symptom of hypoglycemia [abstract].

Furthermore, Barbier, et al. teach the use of a composition comprising starch [claim 4] for the treatment of obesity [claim 28].

The degree of branching and method of preparation of the α -glucan is not seen to be a critical factor. The instant method utilizes α -glucan as a material in the method. Unless the process of preparing the α -glucan changes its structure, then it does not further limit the instant invention. The data given in Table 2 of the specification suggests that a lower degree of branching (glycogen, 8%) gives a greater increase in viscosity

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than a higher degree of branching (reuteran, 16%). Although only two examples of branched glucans are given, and therefore the data is not sufficient to establish a firm relationship between degree of branching and viscosity increase at lower pH, it suggests that amylopectin (4-5% branching) might show an even greater increase in viscosity.

Claims 24-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaufman (US 5,605,893, February 25, 1997) in view of Heber, et al. (Journal of the American College of Nutrition, Vol 13, Issue 6 608-614).

Claims 24-29 are drawn to the food composition of claim 12, further limited as to the degree of branching and dosage form.

Kaufman teaches as discussed above.

Heber, et al. teach significant weight loss observed with Ultra Slim-Fast® [abstract].

One skilled in the art would be motivated to administer the composition of Kaufman in a liquid form because liquid diets have been shown to be successful.

The degree of branching is not seen to be a critical factor as discussed above; therefore, absent any evidence of criticality or unexpected results, the recited degrees of branching are obvious variants of the method taught by Kaufman.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Layla Bland whose telephone number is (703) 272-9572. The examiner can normally be reached on M-F 7:30AM-5:00PM UST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cecilia Tsang can be reached on (571) 272-0562. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ldb


CECILIA TSANG
SUPERVISORY PATENT EXAMINER